

WHAT IS CLAIMED IS:

1. A device for making an air sac, said device comprising;
a male mold provided with at least one mold core, said
mold core being provided with a mold cavity, said male mold
5 further provided with a male prepress board fastened movably
therewith, said male prepress board being provided with at least
one slide hole corresponding in location and number to said
mold core of said male mold; and

a female mold provided with at least one mold core, said
10 mold core being provided with a mold cavity, said female mold
further provided with a female prepress board fastened movably
therewith, said female prepress board being provided with at
least one slide hole corresponding in location and number to
said mold core of said female mold.

15 2. The device as defined in claim 1, wherein said male
prepress board is movably fastened with said male mold by a
plurality of fastening rods, and springs fitted over said fastening
rods; wherein said female prepress board is movable fastened
with said female mold by a plurality of fastening rods, and
20 springs fitted over said fastening rods.

3. The device as defined in claim 1, wherein said mold
cavity of said mold core of said male mold is provided with a
mold cavity edge so as to make volume of said mold cavity
smaller than said slide hole of said male prepress board at the
25 time when said male mold is joined with said female mold;

wherein said mold cavity of said mold core of said female mold is provided with a mold cavity edge so as to make volume of said mold cavity smaller than said slide hole of said female prepress board at such time when said female mold is joined with said male mold.

4. The device as defined in claim 1, wherein said male mold, said male prepress board, said female mold, and said female prepress board are provided with a plurality of water pipes to facilitate the cooling of said device.

5. A method for making an air sac by using the device as defined in claim 1, said method comprising the steps of:

(a) feeding at least one cylindrical polyurethane body into the device;

(b) closing the device such that the cylindrical polyurethane body is flattened out by the male prepress board and the female prepress board, and that a gas-containing air sac body is formed in the slide holes of the prepress boards;

(c) closing further the device such that the mold cores of the male mold and the female mold are moved out of the slide holes of the prepress boards, and that the air sac body is pressed against by the mold cavity edges;

(d) forming an air sac in the mold cavities;

(e) cooling the device; and

(f) opening the device to remove therefrom the air sac;

6. The method as defined in claim 5, wherein the step (a)

comprised a process by which a filling is inserted into the cylindrical polyurethane body.

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